

REMARKS

This Amendment is filed in response to the Office Action dated September 2, 2004. Claims 3-5, 8-9 and 46 are pending in the Application. No amendments to these claims are presented herein. However, new claims 49-60 are added by this Amendment

I. THE CLAIMS ARE PATENTABLE OVER THE PRIOR ART

A. Paragraph 3 Rejection of Claims 3-5, 8, 9 and 46

Claims 3-5, 8, 9 and 46 stand rejected under 35 U.S.C. 103(a) as being assertedly unpatentable over Taylor et al, PCT Application No. WO 98/15418 (Taylor Application) in view of Alasia, U.S. Patent No. 3,937,565 (Alasia Patent). The Applicants respectfully traverse this rejection.

1. Claim 46

In the Amendment filed July 21, 2004 ("Amendment after Final"), claim 46 was amended in accordance with the Examiner's suggestion in the Final Office Action dated May 21, 2004. As amended, claim 46 recites a self authenticating article comprising a substrate having encoded, hidden indicia printed thereon, the encoded, hidden indicia comprising a plurality of lines printed with a predetermined line frequency; and a lenticular lens attached to the substrate, the lens being configured for optically decoding encoded, hidden indicia and having a lens frequency corresponding to the line frequency of the encoded, hidden image. Claim 46 further recites that the lens is disposed so that it may be positioned to overlies the encoded, hidden indicia so that it may be viewed through and decoded by the lens.

2. The Taylor Application

The Taylor Application discloses self-verifying security documents, such as banknotes that comprise a flexible sheet formed from a plastic substrate bearing indicia thereon. Taylor Application, Abstract and page 2, lines 22-29. The sheet has a window of transparent plastic material that includes self-verification means for verifying a security device positioned on a second portion of the sheet. Id. The sheet can be bent, folded or twisted to bring the first and second portions into registration with one another. Id.

The Taylor Application discloses five distinct embodiments that use different optical methods and means for self-verification. In a first embodiment, the security device comprises

microprinting that requires magnification to be observed. Taylor Application, page 8, lines 10-20. The window of the document includes self-verifying means in the form of an optical magnifying lens that can be folded over the security device to enlarge it and render it readable. Taylor Application, page 9, lines 14-19. The magnifying lens is a Fresnel lens that may be formed by embossing, engraving or otherwise deforming the transparent window. Taylor Application, page 9, lines 23-26. The Application states that a lenticular lens may be used in place of the Fresnel lens. Taylor Application, page 4, lines 15 and 16.

In a second embodiment, the security device comprises an area printed using metamerick inks and the self-verification means comprises an optical filter for viewing this area. Taylor Application page 10, line 13 to page 11, line 17. In a third embodiment, the security device and the self-verifying means each comprise polarizing windows such that when the two windows are brought into registration an particular optical effect is created, the presence of which can be used to confirm authenticity. Taylor Application, page 11, line 18 to page 13, line 9. In a fourth embodiment, the self-verifying means includes a first Moire inducing pattern and the security device includes a second Moire inducing pattern, which when superimposed produce a predetermined optical effect that when present serves to verify the document's authenticity. Taylor Application, page 13, line 10 to page 14, line 24. In a fifth embodiment, the self-verifying means comprises a first portion of an image which together with a security device forming a second part of the image form a full image. Taylor Application, page 15, lines 7-19.

3. The Alasia Patent

The Alasia Patent, which is incorporated into the present application by reference (see Application, page 2, lines 17-19), is directed to a system for producing scrambled or coded indicia in print form and for decoding same. Alasia Patent, col. 1, lines 5-8. The indicia are preferably produced photographically in a manner which scrambles the indicia so that they cannot be directly identified without unscrambling or decoding. Alasia Patent, col. 1, lines 42-47. The photographic method employs an autostereoscopic camera. *Id.*

The autostereoscopic camera is used to produce parallax panoramagrams. Alasia Patent, col. 1, lines 50-57. A graticule, which is preferably a lenticular screen comprising substantially vertical contiguous cylindrical lenticules, is located between the lens and the image plane closely adjacent the image plane. Alasia Patent, col. 1, line 62 to col. 2, line 9. Film is positioned at the

combined image plane of the lens and graticule. *Id.* During exposure, the graticule and film are moved together relative to the lens to expose successive portions of the photosensitive element underlying the graticule. *Id.*

The camera-based method of the Alasia Patent can be used to produce lenticular dissections of indicia that can then be printed on a sheet material. Alasia Patent, col. 2, lines 43-63. Viewed by the naked eye, the printed lenticular dissections or “scrambled indicia” are essentially unrecognizable. Alasia Patent, col. 2, line 60. The scrambled indicia, however, can be decoded using a transparent lenticular screen having the same number of lenticules per inch and the same radius of curvature of the lenticules as the lenticular screen used in the camera “provided, however, that the lenticular screen is positioned in the same relation to the scrambled indicia as it was positioned to the photographic image from which the printing plates were made, and also provided that there has been no magnification, either positive or negative, of the printed form of the scrambled indicia with respect to the photographic image. *Id.* (emphasis added). In addition, the optical thickness of the lenticular screen used to decode the image must be as thick as the optical distance from the lenticulated surface of the screen 24 to the film 26 when the photographic image was formed. Alasia Patent, col. 5, lines 60-64 and Figures 2 and 4.

4. The Cited References Cannot Be Properly Combined to Form a Rejection of the Claim 46

In the Office Action, it was asserted that the Taylor Application discloses a self-authenticating article that comprises authenticating means for revealing hidden indicia printed on a plastic paper substitute wherein the authenticating means is a decoding lens that “can be an inlaid preformed lenticular lens.” Office Action, paragraph beginning on page 4 and ending on page 5. It was further asserted that it would have been obvious to one of ordinary skill in the art to modify the article of the Taylor Application “with a lenticular lens having a line frequency corresponding with the images line frequency to decode the image as taught by [the Alasia Patent] . . .”

For the reasons discussed below, the Applicants respectfully submit that the rejection of claims based on the combined teachings of the Taylor Application and the Alasia Patent is improper and should be withdrawn.

(a) Office Action does not point out motivation to combine the teachings of the cited references

The MPEP states that in a rejection under 35 U.S.C. 103, the examiner should set forth the modification of the applied references necessary to arrive at the claimed subject matter and an explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to make this modification. MPEP §706.02(j).

As quoted above, the Office Action states a proposed modification to the teachings of the cited references. The Applicants submit, however, that the Office Action does not provide any explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to look to the Alasia Patent to modify the self-verifying article of the Taylor Application. Instead, the Office Action merely states that it would have been obvious to one of ordinary skill in the art to modify the Taylor articles based on specific teachings of the Alasia Patent.

The Office Action does not point out any suggestion in either reference to indicate why one of ordinary skill in the art would look to the Alasia Patent to modify the Taylor embodiments. The Applicants therefore submit that the Office Action does not establish a prima facie case for obviousness of the claims.

(b) There is no motivation in the references for the modification proposed by the Examiner

As noted above, the Examiner did not point to any basis in the cited references that would lead one of ordinary skill in the art to combine their teachings. The Applicants suspect, however, that the Examiner's basis might be discerned from his assertion that that Taylor discloses a decoding lens for revealing encoded hidden indicia. Office Action, page 3, final paragraph. If this assertion was correct, it could be argued that one of ordinary skill in the art would be motivated to look to the Alasia Patent, which does indeed disclose the use of lenses to decode encoded indicia.

The Applicants, however, disagree with the Examiner's assertion and contend that without the present Application and claims as a guide, there would be no reason for one of ordinary skill in the art to look to the Alasia Patent for substitutes for features of the self-verifying documents of the Taylor Application.

Contrary to the assertion in the Office Action, the Taylor Patent does not include any disclosure or suggestion of documents with self-verifying means that include "a decoding leans

for revealing encoded hidden indicia” printed on the document. At most, the self-verifying means of the Taylor Patent may be said to render visible indicia that are otherwise hidden or disguised in some manner. In the first embodiment discussed above, the indicia are printed so small as to be unreadable without magnification. In the second embodiment, the indicia are printed in metamerick ink that can only be viewed through a tinted window. In the third and fourth embodiments, the self-verification means and the security device combine to form a predetermined optical effect or pattern. In the fifth embodiment, the security device and the verification means each carry a portion of a set of indicia. In none of these methods does the security device include “encoded” indicia printed on the document. Therefore, there is no disclosure of a lens or other self-verifying means that decodes encoded indicia.

It is clear that the Taylor Application does not provide a suggestion to one of skill in the art to look to means for decoding encoded indicia (such as those described in the Alasia Patent) as a substitute for the self-verification means of any of the Taylor embodiments. Indeed, the Applicants submit that there is no suggestion of any kind in either reference that would lead one to combine their teachings.

The Applicants note that the only feature that any of the Taylor self-verifying documents have in common with the system of the Alasia Patent is the use (in one embodiment only) of a lenticular lens. As discussed below, however, the purpose of this lens in the Taylor Application is unrelated to, and indeed incompatible with, the purpose and use of a lenticular lens in the Alasia Patent.

(c) The Alasia Patent teaches away from the modification proposed by the Examiner

The Taylor Reference discloses only one embodiment of a self-verifying document in which a lenticular lens is said to be usable. In that embodiment, the self-verifying document has a magnifying lens that is used to enlarge microprinting printed on the document. The preferred magnifying lens is a Fresnel lens, but a lenticular lens may be used as an alternative. Taylor Application, page 4, lines 12-16.

The Alasia Patent teaches a method of producing an encoded image that may be decoded using a lenticular lens having the same characteristics as the lenticular screen used to produce the encoded image. The Alasia Patent, specifically states, however, that there must be no magnification, either positive or negative, of the printed image relative to the photographic

image. It will be understood by one of ordinary skill in the art that this also means that there is no magnification by the decoding lens. The decoded image is thus the same size as the authentication image prior to encoding.

In contrast, the sole purpose of the lenticular lens in the Taylor Application is to magnify microprinted indicia. This purpose is clearly incompatible with the teachings of the Alasia Patent in which magnification destroys the purpose and usefulness of the lenticular lens as an image decoder. Put another way, the Alasia Patent teaches away from the use of its decoding lenticular lens in the self-verifying documents of Taylor by stating that the decoding process requires that there be no magnification of the image.

(d) The rejection under 35 103(a) should be withdrawn

For at least the above reasons, the Applicants respectfully request that the rejection under 35 U.S.C. 103(a) of claims 46 and dependent claims 3-5, 8 and 9 be withdrawn.

II. NEW CLAIMS

A. Claims 49-54

New claims 49-54 are directed to a self-authenticating article and are similar to claims 46, 3-5, 8 and 9. Independent claim 49 differs from claim 46, however, in that it recites that the line frequency of the encoded indicia is a multiple of the lens frequency. Support for this additional feature may be found in the Application at page 10, lines 22-24 and page 23, lines 4-14.

B. Claims 55-60

New claims 55-60 are directed to a method of producing a self-authenticating document. Support for these claims may be found in the Application at pages 10, 11, 22, 23 and 32-35.

III. CONCLUSION

For at least the reasons set forth above, the Applicants respectfully submit that claims 3-5, 8-9, and 46 are in condition for allowance. The Applicants also believe that new claims 49-60 are in condition for allowance. Applicants therefore request that the Application be allowed and passed to issue.

Should the Examiner believe anything further is desirable in order to place the Application in even better condition for allowance, the Examiner is invited to contact the Applicants' undersigned representative.

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Respectfully submitted,



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